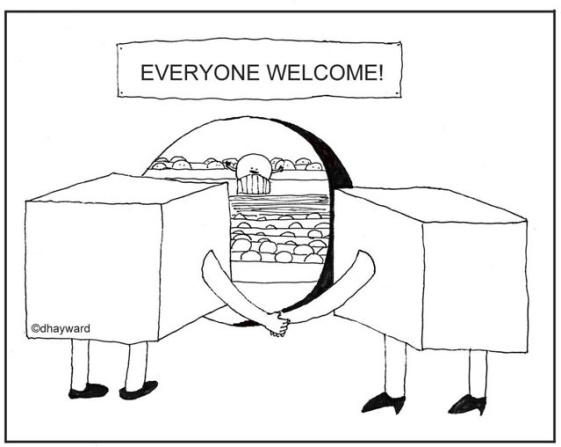
****

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Find examples of 4 different squares and 4 different circles

* Measure the side length of each square and the radius of each circle – you may need help with this to ensure that you measure a diameter which is actually through the centre of the circle first.
* Divide the diameter by 2 to find the radius.
* Ensure that you make all your measurements in the SAME units!
* Show your calculations in the space as well as your answer.

**Data for circles**

|  |  |  |  |
| --- | --- | --- | --- |
| **Circle** | **Radius of circle**  **R** | **Circumference**  **C = 2R** | **Area**  **A = r2** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |

**Data for squares**

|  |  |  |  |
| --- | --- | --- | --- |
| **Square** | **Length of side**  **L** | **Perimeter**  **P = 4 x L** | **Area**  **A = L2** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |

2. Graphing the information

a. Circles

* Graph the relationship of the radius to the circumference of the circles
* Graph the relationship of the radius to the area of the circles on the same graph
* You may be able to use a graphics calculator for this part, or your teacher will provide graph paper. Attach your graph paper to this sheet, or copy the drawing from your calculator, taking care with scales etc.
* What do you notice?

b. Squares

* Graph the relationship of the length of the side to the perimeter of the squares
* Graph the relationship of the length of the side to the area of the squares
* You may be able to use a graphics calculator for this part, or your teacher will provide graph paper. Attach your graph paper to this sheet, or copy the drawing from your calculator, taking care with scales etc.
* What do you notice?